

Upon reading this disclosure, those of skill in the art will appreciate still additional alternative structural and functional designs for a system and a process for a keyboard with key groupings through the disclosed principles herein. Thus, while particular embodiments and applications have been illustrated and described, it is to be understood that the disclosed embodiments are not limited to the precise construction and components disclosed herein. Various modifications, changes and variations, which will be apparent to those skilled in the art, may be made in the arrangement, operation and details of the method and apparatus disclosed herein without departing from the spirit and scope defined in the appended claims.

What is claimed is:

1. A keyboard on a mobile computing device, the keyboard comprising:

- a plurality of keys having a first character value and a second character value, the plurality of keys configured in a layout in which a row of keys of the plurality of keys includes consecutive characters corresponding to the first character value of 'Q', 'W', 'E', 'R', 'T', and 'Y', and the second character values corresponding to one of a plurality of groupings, the groupings including mathematical functions, punctuation functions, and numerical values, each grouping of the plurality of groupings comprising adjacent keys of the plurality of keys; and
- a symbol key, the symbol key configured to toggle the plurality of keys to correspond to the second character value on each key having a first character value and a second character value, the symbol key further configured to have a plurality of states, a first state corresponding to a single-time selection of the second character value of a key having the first character value and the second character value and a second state corresponding to successive selection of the second character value of keys having the first character value and the second character value.

2. The keyboard on a mobile computing device of claim 1, wherein the numerical values grouping of the plurality of groupings comprises a telephone dial pad.

3. The keyboard on a mobile computing device of claim 1, wherein the mathematical functions grouping of the plurality of groupings comprises the symbols '+', '-', '/', '*', and '='.

4. The keyboard on a mobile computing device of claim 1, wherein each of the grouping of mathematical functions and a grouping of symbolic operands is directly adjacent to the grouping of numerical values.

5. The keyboard on a mobile computing device of claim 1, wherein a physical characteristic of keys corresponding to the grouping of numerical values is distinct from a physical characteristic of keys corresponding to the grouping of mathematical functions and keys corresponding to the grouping of symbolic operands.

6. A mobile computing device comprising a keyboard, the keyboard having a configuration comprising:

- a plurality of keys having a first character value and a second character value, the plurality of keys configured in a layout in which a row of keys of the plurality of keys includes consecutive characters corresponding to the first character value of 'Q', 'W', 'E', 'R', 'T', and 'Y', and the second character values corresponding to one of a plurality of groupings, the groupings including mathematical functions, punctuation functions, and numeri-

cal values, each grouping of the plurality of groupings comprising adjacent keys of the plurality of keys; and
 a symbol key, the symbol key configured to toggle the plurality of keys to correspond to the second character value on each key having a first character value and a second character value, the symbol key further configured to have a plurality of states, a first state corresponding to a single-time selection of the second character value of a key having the first character value and the second character value and a second state corresponding to successive selection of the second character value of keys having the first character value and the second character value.

7. The mobile computing device of claim 6, wherein the keyboard comprises a QWERTY keyboard having between 30 and 35 keys inclusive.

8. The mobile computing device of claim 6, wherein the keyboard comprises a QWERTY keyboard having between 15 to 20 keys inclusive.

9. The mobile computing device of claim 6, further comprising a touch-sensitive display screen, and wherein the keyboard is displayed on the touch-sensitive display.

10. The mobile computing device of claim 6, wherein the configuration includes a space bar key.

11. The mobile computing device of claim 10, wherein the mobile computing device comprises a smartphone.

12. A keyboard having language character values, numerical values, and symbol values, the keyboard comprising:

- a plurality of keys arranged in at least four rows and at least five columns, the plurality of keys arranged in four groupings, a first grouping comprising a language character value grouping, a second grouping comprising a numerical value grouping, a first symbol value grouping corresponding to mathematical functions and a second symbol value grouping corresponding to punctuation functions, keys in each of the plurality of groupings being adjacent to one another and having at least two values from one of the four groupings; and

a symbol key, the symbol key configured to toggle the plurality of keys to correspond to the second character value on each key having a first character value and a second character value, the symbol key further configured to have a plurality of states, a first state corresponding to a single-time selection of the second character value of a key having the first character value and the second character value and a second state corresponding to successive selection of the second character value of keys having the first character value and the second character value.

13. The keyboard of claim 12, wherein the keyboard comprises a QWERTY keyboard.

14. The keyboard of claim 13, wherein the QWERTY keyboard comprises between 30 and 35 keys inclusive.

15. The keyboard of claim 13, wherein the QWERTY keyboard comprises between 15 to 20 keys inclusive.

16. The keyboard of claim 13, wherein the keyboard includes a space bar key.

17. The keyboard of claim 12, wherein the keyboard is integrated with a mobile computing device.

18. The keyboard of claim 17, wherein the mobile computing device comprises a smartphone.